Paper No. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte STEVEN Z. MUZSLAY

Appeal No. 1998-3027
Application No. 08/546,179

ON BRIEF

Before KRASS, JERRY SMITH, and BARRETT, Administrative Patent Judges.

KRASS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1, 5, 9, 11, 12, 16 and 17. Claim 3 has not been appealed. Claims 19 and 20 have been allowed and claims 2, 4, 6-8, 10, 13-15 and 18 have been canceled.

The invention is directed to a one-piece hooded socket contact, best illustrated by reference to Figures 1 and 2 of the application and to representative independent claim 1, reproduced as follows:

1. A one-piece hooded socket contact formed from a sheet metal blank that is rolled to form the contact body comprising:

a contact body having a forward mating section and a rear wire connection section;

said mating section comprising a generally cylindrical hood having a front end and a reverse bend of more than 90° at said front end to form a plurality of spring fingers and lead-in tabs between said fingers, all lying within said hood and extending rearwardly from said hood front end with at least said fingers extending inwardly toward the center axis of said cylindrical hood; and

said tabs having a length less than one-quarter that of said fingers, and being stiff to guide a pin contact with said tabs forming at least three radially innermost locations circumferentially spaced apart by about 120° about said axis and lying on an imaginary circle to center a pin contact of generally cylindrical shape in said hood.

The examiner relies on the following references:

Ostapovitch	4,152,042	May 1, 1979
Seidler	4,139,256	Feb. 13, 1979
Schubert	5,119,664	June 9, 1992
Wurster	5,167,543	Dec. 1, 1992
Takenouchi	5,350,321	Sep. 27, 1994

Claims 1, 5, 9, 11, 12, 16 and 17 stand rejected under 35 U.S.C. § 103. As evidence of obviousness, the examiner cites Ostapovitch and Wurster with regard to claims 1 and 9, adding Seidler with regard to claim 5. With regard to claims 11 and 12, the examiner relies on Ostapovitch, Wurster and

Schubert. The examiner relies on Ostapovitch, Wurster, Seidler and Takenouchi with regard to claims 16 and 17.

Reference is made to the briefs and answer for the respective positions of appellant and the examiner.

OPINION

We will sustain the rejection of claim 16 under 35 U.S.C. § 103 but we will not sustain the rejection of claims 1, 5, 9, 11, 12 and 17 under 35 U.S.C. § 103.

Turning first to independent claims 1 and 9, the examiner applies the combination of Ostapovitch and Wurster against the claims. Ostapovitch clearly discloses a socket formed of a sheet metal blank with a contact body having forward and rear sections. At the front end, there is a reverse bend of more than 90 degrees which forms a plurality of spring fingers 13 and lead-in tabs 50, all lying within a “hood” of the socket and extending rearwardly from the front end and with the fingers extending inwardly toward the center axis of the hood. See Figures 19 and 20 of Ostapovitch.

While Ostapovitch's contact structure is shaped like a "box" and Wurster's device is shaped partly cylindrical and partly cone-shaped, it is clear to us that the cylindrical portion of Wurster and the elongated box-shape of Ostapovitch would have suggested employing a cylindrical shape to the hooded socket of Ostapovitch and appellant does not argue the cylindrical shape of the hood as a patentable distinction.

With regard to the claim limitation of the tabs "forming at least three radially innermost locations circumferentially spaced apart" by about 120 degrees about a central axis in claim 1 and similar language in claim 9, the examiner points out, at page 3 of Paper No. 11, that Wurster shows this generally claimed structure and that it would have been obvious to provide Ostapovitch with Wurster's teachings of having the fingers and tabs spaced 120 degrees apart in order to "provide better surrounding and centering forces to a pin located in the socket." We find nothing in appellant's arguments which would show error in the examiner's position.

However, appellant clearly argues the claim limitation of the tabs having a length "less than one-quarter" that of said fingers, and this limitation appears in independent claims 1 and 9. While the examiner relies on the "tabs" 44, 46 and 48 of Wurster to provide this teaching, it is clear from Wurster's disclosure that these elements are not "tabs," as claimed, but rather "anti-tangle shields" which prevent tangling of the sockets during tumbling or processing. These anti-tangling shields of Wurster are not used to "guide a pin contact," as required by claim 1, and it is a bit of a stretch, in our view, to call these shields "lead-in tabs" as set forth in instant claims 1 and 9. Since the only reference that has what might reasonably be considered "lead-in tabs" is Ostapovitch and the lead-in tabs, 50, of Ostapovitch are clearly not of a length which is "less than one-quarter" that of the fingers, 13, the limitations of instant claims 1 and 9 are not met.

Now, the examiner contends that it does not matter that Ostapovitch does not disclose stiff tabs being less than one-fourth the length of the fingers because "stiff" is a relative

term and that Ostapovitch's tabs are "stiff" relative to a device made of more ductile material. See pages 2-3 of Paper No. 11. However, it is our view that while "stiffness" may be, in general, a relative term, with regard to the instant claims (of claims 1 and 9, only claim 1 actually recites the tabs as being "stiff"), the "stiffness"of the tabs is relative to the length of the fingers, i.e., the stiffness claimed is specifically that amount of stiffness achieved by the tabs being "less than one-quarter" the length of the fingers. While method claim 9 does not recite the tabs being "stiff," it is clear that the recitation of the specific length of the tabs vis-'a-vis the length of the fingers does provide for a certain degree of "stiffness." Thus, the relative lengths of the tabs and fingers are an important part of the instant claims and the examiner has not provided any evidence indicating the obviousness of providing for these relative lengths since the "tabs" in Wurster are not tabs at all but, rather, anti-tangle shields and the length of the tabs in Ostapovitch does not meet the claim limitation of it being "less than one-quarter" the length of the fingers.

Accordingly, we will not sustain the rejection of claims 1 and 9 under 35 U.S.C. § 103. We also will not sustain the rejection of claims 5, 11 and 12 under 35 U.S.C. § 103 since these claims depend from claims 1 and 9 and neither Seidler nor Schubert, applied for other reasons in the rejections of the dependent claims, provides for the deficiencies noted supra with regard to Ostapovitch and Wurster.

We now turn to independent claim 16 which does not have the limitation of the tab lengths being less than one-quarter the length of the fingers. Seidler is employed to show the obviousness of using a cylindrical shape for the contact hood. The argument centers about Takenouchi and whether it shows the specifically claimed structure of the fingers recited in the last paragraph of claim 16. It is our view that Figure 2 of Takenouchi clearly shows the recited structure since contact piece 19 is deformable and has a front and rear portion. The front portion (left side) extends rearwardly and radially inwardly and the rear portion (right side) extends rearwardly and radially outwardly from the rear end of the front portion. The rear end of the front portion is at the vertex, labeled as

19e in Figure 2. The rear portion has a "reversely curved rear end with a convexly curved radially outer surface" (see the curved portion of the right-most portion of element 19 in Figure 2) which presses radially inwardly against the inside of the hood when a pin contact is inserted into the socket contact (See Figure 3 of Takenouchi).

Appellant contends that portion 19e "cannot freely deflect outwardly because of limitations by definitely non-cylindrical part 21e" [brief-page 7]. We disagree. Figure 3 clearly shows that as the pin 14 is inserted, element 19 is deflected down and to the right. Therefore, when the pin 14 is inserted, element 19 is pressed "radially inwardly against the inside of said hood," as claimed. Moreover, the fingers shown in instant Figures 2 and 8 are of the same general shape and structure as that shown by Takenouchi. To the extent appellant is arguing that since the end 19d of Takenouchi moves along another portion of element 19 and not directly along the cylindrical surface of the hood, the entire element 19 may be considered to be in contact with the inside of the hood and when portion 19d is pressed radially inwardly, its

movement along the bottom portion of element 19 is still, broadly, “against the inside of said hood,” as claimed.

Accordingly, we will sustain the rejection of claim 16 under 35 U.S.C. § 103.

We will not sustain the rejection of claim 17 under 35 U.S.C. § 103 since this claim contains the limitation of the tabs having a length “less than one-fourth the length of said

fingers." Takenouchi adds nothing with regard to the deficiencies of the references discussed supra relative to this limitation.

We have sustained the rejection of claim 16 under 35 U.S.C. § 103 but we have not sustained the rejections of claims 1, 5, 9, 11, 12 and 17 under 35 U.S.C. § 103.

Accordingly, the examiner's decision is affirmed-in-part.

No period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

ERROL A. KRASS Administrative Patent Judge	)
JERRY SMITH Administrative Patent Judge	) BOARD OF PATENT APPEALS AND INTERFERENCES
LEE E. BARRETT	)

Administrative Patent Judge)

jg

LEON D. ROSEN, ESQ.
FREILICH, HORNBAKER & ROSEN
10960 WILSHIRE BLVD. SUITE 840
LOS ANGELES, CA 90024